



NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON. DC 20361-0001

IN REPLY REFER TO NAVAIRINST 4355.7C AIR-511
4 Dec 87

NAVAIR INSTRUCTION 4355.7C

From: Commander, Naval Air Systems Command

Subi: INSPECTION OF LIGHTING MOCKUPS OF NAVAL AIRCRAFT

Encl:

- (1) Mockup sequence of events
- (2) Representation for lighting mockup events
- (3) Requirements for lighting compliance review
- (4) Lighting compliance review (sample)
- (5) Notification letter lighting mockup inspection (Sample)
- (6) Arrangements for lighting mockup inspection (Sample)
- (7) Flow chart of form NAVAIR 4355/1 recommended changes for mockup inspections
- (8) Sample of daily summary of lighting mockup board decisions
- (9) Sample cover page of lighting mockup board report
- 1. Purpose. This instruction states the requirements for the inspection of lighting mockups of Naval aircraft and the responsibilities and functions of lighting mockup boards in conducting these inspections. (For inspection of aircraft mockups see NAVAIR Instruction 4355.8C.)
- 2. <u>Cancellation</u>. This instruction supersedes NAVAIR Instruction 4355.7B of 23 February 1981.
- 3. <u>Scope</u>. This instruction applies to all lighting mockups being developed under the cognizance of the Naval Air Systems Command (NAVAIR).
- 4. Requirements. The requirements for lighting mockups are contained in SD-8706C. The requirements for the construction of lighting mockups are described in the current version of specification MIL-M-8650.
- 5. <u>Lighting Mockup Inspections</u>. Lighting mockup inspections will ensure suitability of the day and night interior lighting (including Night Vision Goggle (NVG) compatible) and exterior lighting of Naval aircraft. The lighting inspection is composed of three events: (a) the Lighting Compliance Review, (b) the lighting mockup inspection, and (c) the lighting mockup reinspection. Enclosure (1) presents a schedule of events for the effective planning and conduct of lighting mockup.
- 6. Representation. Representation at inspections of lighting mockups of naval aircraft will be as indicated in enclosure (2).

7. Lighting Compliance Review

- a. <u>Purpose</u>. This review will be conducted to assist the lighting mockup board in determining that specification compliance is achieved and major lighting deficiencies are identified.
- b. Conduct of the Review. The Naval Air Test Center (NAVAIRTESTCEN) will conduct a crew station lighting mockup compliance review using systematic inspection

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procedures and criteria which have been developed for this purpose. Detailed requirements for preparation and conduct of the review are contained in enclosure (3). A report will be prepared per paragraph 10a of this instruction. A sample letter establishing the schedule and contractor support requirements for the review is contained in enclosure (4). Representation at this review may be increased or decreased at the discretion of the Head, Crew Station Design and Human Factors Engineering Branch (AIR-5313). This review will take place at least 5 working days prior to the commencement of the lighting mockup inspection period.

c. NVG Compatible Compliance Reviews. The same general requirements described in paragraph 7b. of this instruction apply to NVG compatible lighting compliance reviews. However, the procedures and criteria will include the use of NVG's and corresponding equipment (e.g., night sky projectors) required to assess the specification compliance of NVG compatible lighting and will determine any limitations existing in the mockup which preclude a complete evaluation. The letter establishing the schedule and contractor support requirements for the review will also assign responsibility for providing the NVG equipment required.

8. Lighting Mockup Inspection

- a. Lighting Mockup Boards. Lighting mockup boards are specifically charged with determining compliance of the mockup with the aircraft detail specification and other applicable contract requirements concerning interior lighting of flight crew station, operator stations, passenger stations, cargo compartments, equipment compartments and exterior lighting. In no case will a lighting mockup board approve a recommended change unless it is specifically and directly concerned with lighting or is related to an approved change from the aircraft mockup board which has been deferred to the inspection of the lighting mockup. Disposition of all business brought before the board will be by majority vote of the members.
- (1) Chairperson of the Board. The Director, Systems Engineering Management Division (AIR-511) or his/her designate, will be the chairperson of the lighting mockup board, and is hereinafter referred to as "the chairperson." The chairperson will convene lighting mockup boards for the inspection of lighting mockups of new or modified naval aircraft. Subject to the limitations delineated herein, the chairperson will be solely responsible for all phases of the mockup inspection. The chairperson may reduce or increase the representation in enclosure (1) provided circumstances peculiar to a specific lighting mockup warrant such action. In the event that approved changes of the aircraft mockup board were deferred to the inspection of the lighting mockup, the chairperson will ensure that membership of the board and technical advisors include cognizant personnel to review and, if necessary, resubmit such changes for lighting mockup board action.
- (2) <u>Lighting Mockup Board Recorder</u>. The chairperson will appoint a person who will serve as the official board recorder and nonvoting advisor to the board.
 - b. <u>Technical Advisors</u>. Technical advisors to the lighting mockup board will be as indicated in enclosure (2). Technical advisors are not members of the lighting mockup board but act in an advisory capacity and will be present at all board meetings, unless specifically excused by the chairperson.

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c. Administrative Requirements for Inspection of Lighting Mockups

- (1) <u>Dates.</u> Proposed dates for inspection of lighting mockups will be subject to approval by AIR-511 to eliminate any conflict in schedules. The dates of the lighting mockup inspection will be established in conjunction with the aircraft contractor, approximately 7 weeks in advance of the inspection.
- (2) Designation of Personnel. Immediately upon establishment of the date for the lighting mockup inspection, the chairperson, will notify all Naval Air Systems Command Headquarters (NAVAIRHQ) divisions and appropriate field activities of the scheduled periods for the lighting compliance review and lighting mockup inspection. A sample letter for this purpose is contained in enclosure (5). This letter will request the names of the personnel authorized to attend, and require the attendees to provide their own form OPNAV 5521/27, Visit Request/Vistor Clearance Data, to NAVAIRHQ (AIR-511) with copies to the cognizant Naval Plant Representative Office (NAVPRO) and contractor. The chairperson, when not AIR-511, will submit a list of names to AIR-511 for approval.
- (3) Schedule of Events. At least 3 weeks prior to the inspection, the chairperson will prepare and distribute to each board member and technical advisor a schedule of events for the lighting mockup inspection period, including a list of board members and technical advisors with the division or activity represented, and pertinent information on travel and accommodation. A sample letter for this purpose is contained in enclosure (6).
- (4) Notification. At least 2 weeks prior to the convening of the lighting mockup board, the chairperson will forward a list of names and security clearances of the members of the board and the technical advisors to the contractor and the cognizant NAVPRO. The NAVPRO will be instructed that only the designated personnel on this list, contractor designated personnel and a designated representative of the NAVPRO will be allowed access to the lighting mockup during the period of the mockup inspection, except by direct authorization of the chairperson or the Commander, Naval Air Systems Command. The chairperson will inform the contractor that mockup procedures will be conducted per this instruction and furnish copies of this instruction to the contractor for guidance.
- (5) Lodging Accommodations. The chairperson will make arrangements with the NAVPRO for hotel or lodging accommodations, and for travel to and from the contractor's plant, if required.

d. Conduct of the Lighting Mockup Inspection

(1) Lighting Mockup Briefing and Inspection. An initial meeting of all the Navy attendees of the lighting mockup inspection will be held immediately after arrival at the contractor's plant. At this meeting the chairperson will present information on the scope of the mockup inspection, history and special features of the aircraft, the applicable contract detail specification, recommended changes which were deferred from the aircraft mockup, and new requirements which have been officially approved subsequent to issuance of the contract detail specification. The chairperson will outline the limitations of the authority of the board and will request the board to keep recommended changes to a minimum essential to obtaining satisfactory lighting in the production article. Attendees will be advised that form NAVAIR 4355/1, Recommend

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Change - Mockups/Inspections, should be used to describe specific problems uncovered during the inspection or arrived at by discussions with their contractor counterparts and to make recommendations for corrective action thereon. After this initial meeting, the board members will proceed to inspect the mockup, attend mockup board conferences and at the direction of the chairperson, make the mockup available to the contractor for incorporation of changes per the schedule of events. The chairperson may modify the schedule as progress of the inspection may require.

- (a) <u>Inspection of Interior Lighting (Night Operation)</u>. Prior to any inspection of interior lighting for night operation, mockup representatives should become "dark adapated" for at least 30 minutes either in a darkened room or by red goggles.
- (b) <u>Inspection of Interior Lighting (NVG Compatible)</u>. The inspection of NVG compatible lighting mockups will be conducted using procedures developed by NAVAIRTESTCEN to ensure that all aspects of the NVG compatible lighting are reviewed.
 - (c) <u>Inspection of Interior Lighting (Day Operation)</u>. The actual aircraft cockpit or cockpit mockup will be inspected in daylight (bright sunlight) or simulated daylight conditions to determine adequacy of warning lights, caution lights, and any other features considered pertinent by the board.
 - (2) Appendix 9 to Specification MIL-M-8650. The NAVAIR lighting specialist, (AIR-546B1) will, during his/her inspection, prepare appendix 9 (rough draft) of MIL-M-8650 for inclusion in the mockup board report. The Appendix will represent the mockup as it appeared at the beginning of the inspection period. The final typewritten reproducible copy of appendix 9 containing the proper security classification, will be retained by the NAVAIR light specialist. Seven copies, made from the reproducible copy, will be submitted to the chairperson within 3 weeks after completion of the lighting mockup inspection. MIL-M-8650 requires that the contractor have completed copies of appendix 9 available at the beginning of the mockup inspection and that such copies be identified by the words "Prepared by Contractor" at the top of each page. These appendices are for information only and will in no way relieve the cognizant representatives of their responsibilities specified above.

(3) Recommended Changes and Action Thereon

- (a) Only the designated lighting mockup inspection representatives of enclosure (2), designated NAVPRO representatives, and designated contractor representatives may submit recommended changes to the mockup.
- (b) All recommended changes will be recorded on form NAVAIR 4355/1, which can be obtained from the NAVAIR recorder. In the event a photograph (self-developing film) is necessary to show the equipment or part involved, it will be attached to the form in the upper left corner, as indicated. For the flow of recommended changes, signatures on the forms during steps 2 and 3 of enclosure (7) indicate that the step review has been accomplished, but does not necessarily indicate concurrence. Any brief comments which may be considered necessary for preliminary information of the board will not be written on the face of the form but will be attached on a separate sheet. The recorder will be responsible for the control and expeditious flow of the recommended change form. The recorder will review each recommended change for compliance with the aircraft detail specification and for technical adequacy and

necessary editing with the originator's concurrence and will make sufficient copies so that each board member will have a set of recommended changes for use during the mockup board conferences. The recorder, with assistance of his/her contractor counterpart, may maintain a status board displaying the status of each recommended change from initiation to completed board action. The chairperson will bring all recommend changes before the mockup board at scheduled conferences.

- (c) Completed action will not be taken by the mockup board on recommended changes which affect the detail specification and are within the category of class I changes, as defined in DOD-STD-480 including those which affect basic design requirements, and/or require addition, deletion, or changes in government furnished equipment. These changes will be discussed and the board may recommend approval and request that the contractor submit a form DD 1692, Engineering Change Proposal (ECP), or a study proposal, as applicable, for NAVAIRHQ action. Board decisions requesting the contractor to submit a study proposal will be held to a minimum.
- (d) Completed action will be taken by the mockup board on all recommended changes that are within the authority of the mockup board as stated in paragraph 8a of this instruction and all other changes that are within the category of class II changes, as defined DOD-STD-480.
- (4) Mockup Changes. No changes will be made in the lighting mockup except at the direction of the chairperson.

(5) Daily Summary of Lighting Mockup Board Decisions and Addendum

- (a) The recorder will prepare a daily summary of lighting mockup board decisions, enclosure (8), and present copies thereof to all personnel attending on the following day. Recommended changes will be grouped by subject as shown on form NAVAIR 4355/1 and a page-size three-view drawing showing final approved locations of exterior lights, if applicable, will be included in the final daily summary. Action on any changes of the aircraft mockup which were deferred for inspection at the lighting mockup will also be included in the daily summary. These latter changes will be grouped, suitably identified, and will reference the items of the daily summary of lighting mockup board decisions.
- (b) An addendum to the daily summary of lighting mockup board decisions, when required, will be prepared by the recorder as soon as practicable after completion of the mockup inspection. The addendum will correct any errors and will contain information regarding items of any daily summary which have been superseded, canceled, reinstated, or in any way modified by subsequent items of the daily summary.
- 9. Mockup Changes and Reinspection. Changes to the lighting mockup, which cannot be made and inspected during the lighting mockup inspection period, will be made by the contractor as expeditiously as possible. Within 45 days after adjournment of the mockup board, the mockup will be reinspected by a committee as indicated in enclosure (2). This reinspection will include all post mockup inspection changes and preparation of a revised Appendix 9 to MIL-M-8650 of the mockup to reflect the mockup with all approved changes incorporated. The reinspection will also include changes which have resulted from contractor studies or ECP's requested by the lighting mockup board. Three weeks prior to the reinspection, the chairperson will determine who will be attending the

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reinspection. At least two weeks prior to the reinspection, the NAVPRO and contractor will be notified of the reinspection schedule and the attendees.

10. Lighting Mockup Reports

- a. Lighting Mockup Compliance Review Report. The results of the review will be documented in a report supplemented by form NAVAIR 4355/1. The report will be forwarded to the NAVAIRHQ (AIR-5313) prior to the convening of the lighting mockup board for use during the lighting mockup inspection. The report will include a brief description of the compliance review methods, any information the review team considers pertinent and a summary of the recommended changes arranged in order of priority.
- b. <u>Lighting Mockup Inspection Report</u>. The chairperson will prepare and distribute a report of the lighting mockup inspection within 30 days after receipt of the lighting mockup photographs required by specification SD-8706C. The report will include the following:

(1) Content

- (a) Cover Page. A cover page, as shown in enclosure (9), will be prepared for the signature of AIR-511.
- (b) First Paragraph. This paragraph will specify the date and place of the lighting mockup inspection and will list the mockup board members and technical advisors, and division, branch or office of their respective activity represented.
- (c) Second Paragraph. This paragraph will set forth detailed discussion of any important changes that were referred by the mockup board to NAVAIR for action.
- (d) Third Paragraph. This paragraph will contain applicable reference to the enclosures (see subparagraph 10b(1)(f) below) and will indicate the status of the lighting mockup as specified in paragraph 4.4 of Specification MIL-M-8650.
- (e) Signature Page. A signature page will be prepared providing space for signature of each member of the lighting mockup board.
- (f) Enclosures. Enclosures to the lighting mockup board report will consist of: (1) one copy of all daily summaries of lighting mockup board decisions and addenda thereto, if any; (2) one copy of the checkoff list (appendix 9 to Specification MIL-M-8650); and (3) one set of day and night lighting mockup photographs showing all caution warning and/or, advisory lights on and/or off as appropriate for day or night operation.
- (2) Signature and Approval of Lighting Mockup Report. Approval of the lighting mockup board report by AIR-511 constitutes final formal approval of the board's decisions, except for class I changes which require further action as noted in subparagraph 8d(3)(d). The contractor's copy of the approved report will be forwarded by an appropriate communication, signed by the NAVAIRHQ contracting officer, authorizing the contractor to proceed as necessary to comply with lighting mockup board recommendations.

- (3) <u>Distribution</u>. The lighting mockup board report will be distributed as follows:
- (a) Original (less check lists) to the Communications and Information Handling Branch (AIR-7154) marked for "Contract Files".
- (b) One copy (complete) to: Cognizant assistant program manager (Systems and Engineering) (AIR-511XX); Cognizant Program Manager, Air (PMA) or Air Program Coordinator (APC); Systems Criteria Branch (AIR-5112) for use by other NAVAIRHQ divisions; NAVAIR lighting specialist (AIR-546D4); Commander, Naval Air Test Center; Cognizant NAVPRO; and Commander, Naval Safety Center.
 - (c) Two copies (complete) to AIR-5313.
- (d) One copy (less photographs) to contractor via NAVPRO (see paragraph 10b(2)).
- (e) One copy (less check lists and photographs) to: Evaluation Division (AIR-522); Chief of Naval Operations (OP-05); Chief of Naval Air Training (training aircraft only); and Commander, Pacific Missile Test Center.
- c. Mockup Reinspection Report. The chairperson will prepare and distribute a supplementary report of the reinspection within 30 days after receipt of the photographs showing the lighting mockup revisions. The report will contain the results of the reinspection and be signed by the mockup board member(s) in attendance at the reinspection.
- 11. NAVPRO. Any reference to NAVPRO will mean the Naval Plant Representative Office or assigned government representative office having responsibility for contract administration services at the contractor's plant.
- 12. Mockup Reports. The reports required by paragraph 10 are exempt from report control by OPNAV Instruction 5214.7.

13. Forms

- a. NAVAIR Field Acitivities. OPNAV 5521/27, Visit Request/Vistor Clearance Data, S/N 0107-LF-055-2235, and DD 1692, Engineering Change Proposal, S/N 0102-LF-020-8001 are available in the Navy supply system and may be requisitioned per NAVSUP P-2002.
- b. NAVAIRHQ. NAVAIR 4355/1, Recommended Change-Mockups/inspections, and DD 1692 are stocked by AIR-5112.

L. E. BLOSE

Assistant Commander for Systems and Engineering

Distribution: (see next page)

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Distribution: (2 copies unless otherwise shown)

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Stocked: Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120-5099

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	M	MOCKUP SEQUENCE OF EVENTS
ACTION	RESPONSIBLLITY	-8 -4 0 +4 +8
Establish Mockup Event Dates	NAVAIRHQ	
Notify Contractor	NAVAIRHQ	
and Event Participants	MAINATORDORDON	
Provide Lighting Compliance Review	MAVALKIESICEN	
Requirements to NAVAIR		
Notify Contractor of	NAVAIRHQ	
Compliance Review Require-		
ments & Request Mockup		1
Configuration Status		
Provide Lighting	NAVAIRTESTCEN	
Criteria Report &		
Inspection Procedures		
Provide Mockin Config-	Contractor	
Distribute Mockup	NAVAIRHQ	
Schedule of Events		
Provide Attendee List	NAVAIRHQ	
to NAVPRO/Contractor		
Conduct Lighting Compliance Review	NAVALKIESICEN	•
Provide Compliance	NAVAIRTESTCEN	
Review Report		
Lighting Mockup		4
Inspection Period	Citation	
Lighting Mockup	MAVALRHQ	⋖
Lishection nepot 5		8
Reinspection		
Lighting Mockup	NAVATRHO	◀
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REPRESENTATION FOR LIGHTING MOCKUP EVENTS

1. Lighting Mockup Compliance Review		
a. NAVAIRTESTCEN	2	
b. Aircrew System Advisory Panel (ASAP) members or other appropriate operationally experienced aircrew.	1/2	(R
2. Lighting Mockup Inspection		
a. Lighting Mockup Board Members. Lighting mockup board membership will not exceed the following:		
Director, Systems Engineering Management Division (AIR-511) or designate	1	
Head, Crew Station Design and Human Factors Engineering Branch (AIR-5313) or designate	1	
NAVAIR Lighting Specialist (AIR-546)	1	
Mockup Board Recorder (nonvoting)	1	
TOTAL	4	
b. <u>Technical Advisors</u> . Technical advisors representation will not exceed the following:		
ASAP members		(A
Systems safety coordinator (AIR-516C)	1	(R
Logistics and Maintenance Policy Division (AIR-411)	1	
Program Manager, Air (PMA) or Air Program Coordinator (APC)	1	
Assistant Program Manager (Systems and Engineering) (AIR-511XX)	1	
Crew Systems Division (AIR-531)	1	
Avionics and Computer Resources Division (AIR-546)	1	
NAVAIRTESTCEN	2	
COMNAVAIRLANT and COMNAVAIRPAC	1 each	n
NAVAIRDEVCEN (Man-Machine Integration Division)	1	
NAVPRO	1	
1,	Encl	(2)

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NAVSAFECEN (mandatory invitation to all mockups)	ı
NAVAV NDEPOTOPSCEN	1
c. Where applicable or deemed desirable, the Director, Systems Engineering Management Division may request additional technical advisors. Not to exceed the numbers specified from the following activities:	
Avionics and Computer Resources Division (AIR-546)	1
Reconnaisance and Photographic Systems Division (AIR-547)	1
CNATRA (trainer aircraft only)	1
PACMISTESTCEN	1
U.S. Air Force	1
U.S. Army	1
U.S. Coast Guard	1
U.S. Marine Corps	1
3. Mockup Reinspection. Reinspections of lighting mockups will be conducted by at least the following:	
One Mockup Board Member	1
Appropriate Technical Advisors	1
Mockup Board Recorder	1

REQUIREMENTS FOR LIGHTING COMPLIANCE REVIEW

1. The inspection of a lighting mockup for specification compliance requires the development of a systematic approach, containing evaluation criteria and procedures for use by mockup inspection representatives. To accomplish this, the following responsibilities are assigned:

a. NAVAIRHQ

- (1) Provide tasking to NAVAIRTESTCEN to identify criteria, create inspection procedures and perform the lighting compliance review.
- (2) Assist NAVAIRTESTCEN, where required, in the conduct of the lighting compliance review by providing necessary documentation and liaison with the contractor.
- (3) Ensure that recommended changes to the mockup contained in the lighting compliance review report are presented for consideration to the mockup board.

b. NAVAIRTESTCEN

- (1) Develop a lighting report that consolidates all applicable specifications and contract criteria into a ready reference, for use during the compliance review and by representatives to the lighting inspection, which relates the design criteria to each piece of equipment or component in the crew station. Forward 2 copies of the report to NAVAIRHQ (AIR-5313) 3 weeks prior to the review.
- (2) Develop procedures, consistent with the requirements of this instruction, which provide a systematic methodology for the inspection of the lighting mockup to identify specification non-compliance and other design deficiencies. These procedures, using the criteria report, should result in a comprehensive inspection of the mockup. The procedures should be time efficient with respect to mockup usage and personnel resource requirements. Forward 2 copies of the procedures to NAVAIRHQ (AIR-5313) 3 weeks prior to the review.
- (3) Provide to NAVAIRHQ, lighting compliance review requirements for mockup availability, inspection personnel and administrative support in sufficient time (approximately 6 weeks prior to review) to permit adequate preparation for the compliance review.
- (4) Conduct the lighting compliance review and prepare a report which contains recommended change forms (NAVAIR 4355/1) completed during the review together with a narrative portion detailing other problem areas identified including any difficulties encountered in conducting the review. This report will be forwarded to the Head, Crew Station Design and Human Factors Engineering Branch (AIR-5313), or designate, at the commencement of the lighting mockup inspection.



DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND NAVAL AIR SYSTEMS COMMAND HEADQUARTERS WASHINGTON, DC 20361 NAVAIRINST 4355.7C 4 Dec 87

IN REPLY REFER TO

From: Commander, Naval Air Systems Command

To: Contractor

Subj: NOTIFICATION OF REQUIREMENTS FOR LIGHTING COMPLIANCE REVIEW

Ref: (a) Contract #

(b) SD-8706C Addendum #

Encl: (1) Support Requirements for the Lighting Compliance Review

- 1. Following the provisions of references (a) and (b), a Lighting Compliance Review of the aircraft lighting mockup will be conducted from to *. This review will be under supervision of the Naval Air Test Center, Patuxent River, Maryland and is intended to determine compliance of the mockup with the aircraft detail specification and other applicable specifications and contract documents.
- 2. In connection with this review, it is requested that a list of mockup items, which are not representative of those to be installed in production aircraft, be provided at least 2 weeks prior to the compliance review, with a copy to NAVAIRTESTCEN (SY-72).
- 3. Enclosure (1) lists support requirements for the conduct of the review.

* This review will require approximately 3 days for completion.

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Encl (4)

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DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON, DC 20361

NAVAIRINST 4355.7C 4 Dec 87

From: Commander, Naval Air Systems Command

Subj: NOTIFICATION OF LIGHTING MOCKUP INSPECTION

Ref:

(a) Contract #

(b) NAVAIRINST 4355.7C of 4 Dec 87

Encl: (1) Agenda, Mockup Description and Procedures

(2) Facilities and Support Requirements

- 1. Following the provisions of references (a), the lighting mockup inspection of the aircraft will be held at from to . A detailed agenda will be provided at a later date.
- 2. Addressees are requested to identify representatives, not later than , using form OPNAV 5521/27, Visit Request (1 copy to AIR-511, 1 copy to the cognizant NAVPRO and 1 copy to the contractor).
- 3. Questions about the mockup should be directed to

Distribution:

DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND NAVAL AIR SYSTEMS COMMAND HEADQUARTERS WASHINGTON, DC 20361

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IN REPLY REFER TO

From: Commander, Naval Air Systems Command

Subj: ARRANGEMENTS FOR LIGHTING MOCKUP INSPECTION

Ref:

(a) NAVAIR 1tr

(b) NAVAIRINST 4355.7C of 4 Dec 87

- Encl: (1) Agenda, Operating Procedures and Mockup Description
 - (2) Facilities and Support Requirements
 - (3) List of Lighting Mockup Board Members and Technical Advisors
- 1. As announced by reference (a), the lighting mockup inspection of aircraft will be held at from to . This inspection will be conducted per reference (b).
- 2. Enclosure (1) contains the agenda, mockup description and operating procedures for the inspection. Representatives are requested to become familiar with reference (b).
- 3. Lodging accommodations for Mockup Board Members and Technical Advisors have been arranged at the
- 4. Enclosure (2) contains requirements for facilities and administrative support for the mockup inspection.

Distribution:

Encl (6)

FORMAT FOR ENCLOSURE (1)

Agenda, Operating Procedures and Mockup Description

- I. Agenda This section shall describe the lighting mockup events by date and commencement times.
- II. Operating Procedures This section shall describe any inspection procedures supplementary to those contained in reference (b). In addition, it shall contain a diagram of the mockup area which shows its location within the building.
- III. Mockup Description This section shall contain a brief description of the mockup together with any photographs or drawings deemed appropriate.

FORMAT FOR ENCLOSURE (2)

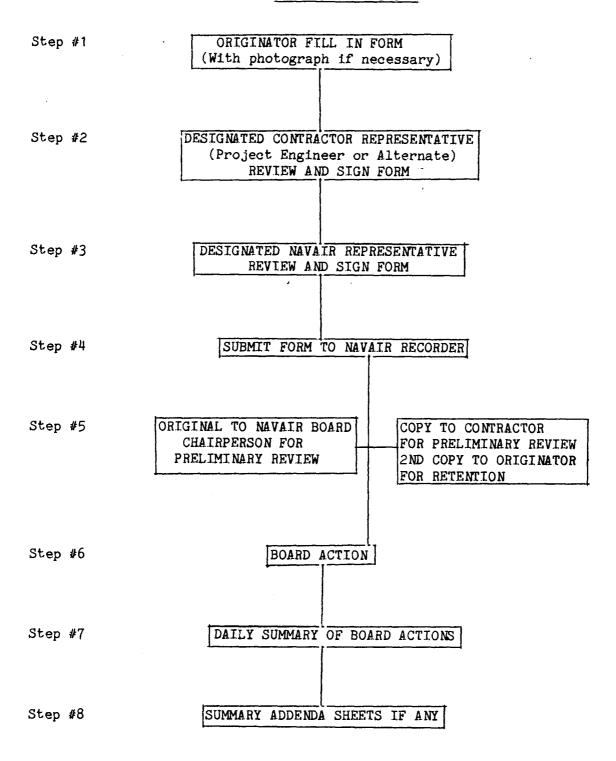
Facilities and Support Requirements

In addition to the requirements of MIL-M-8650, the following items are desirable for a successful mockup inspection.

- I. Facilities In addition to the large conference room for mockup board activities, other smaller rooms are needed for other team meetings relative to the number of teams present at the mockup inspection.
- II. Administrative Support
- A. Typing to handle drafting and final typing of form NAVAIR 4355/1, Recommended Change Forms and to type the Daily Summary required prior to the beginning of each days mockup board proceedings.
 - B. Reproduction Facilities.
 - C. Audio/Visual Aids.
 - 1. Projection equipment and an operator for overhead projector.
 - 2. Facilities for making overhead transparencies.

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FLOW CHART OF RECOMMENDED CHANGES FOR MOCKUP INSPECTIONS FORM NAVAIR 4355/1





SAMPLE

COVER PAGE

(Classification)

LIGHTING MOCKUP BOARD REPORT

FOR

MODEL AIRCRAFT

CONTRACT NO.

,	APPROVED:
	Director, Systems Engineering Management Division
	DATE:
(Classification)	,

25

(Classification)

SAMPLE DATI V SHIMMARY OF LIGHTING MOCKILP BOARD DECISIONS

	DAILY SUMMARY OF LIGHTING MOCKUP BOARD DECISIONS							
	MODEL							
	DATE		`					
NOTE								
ITEM	RECOMMENDATION	DECISION	CHANGE MOCKUP	CHG. DETAIL SPEC.	EST. WT. CHG.			
1	Correct excess light emitting from around the NAVIR No. indication and wheel-flap indicators. (35)	Approved	Yes	No	None			
2	UHF channel window on the instrument panel emits excess light from the window walls. This should be corrected. (6)	Approved	Yes	No	None			
3	The ring lighting of the edge "flip-floops" and other displays cause glare in the canopy. The lower portion should be modified to prevent the line of light present. (49)	Approved Contractor to furnish lighted flip- flop indicator.	No	No	None			
EXTE	RIOR LIGHTING							
4	Dim light on tail. (58)	Approved	No	No	None			